



ARLINGTON FINANCE COMMITTEE
MINUTES OF MEETING
COMMUNITY SAFETY BUILDING
O'NEILL ROOM
7:30 PM 2/26/18

ATTENDEES:

Deyst*	White*	Caccavaro*	Kellar	McKenna*
DeCoursey*	Wallach	Harmer*	Gibian*	
Tosti*	Foskett*	Bayer**	Duvadie	
Hansberry*	Beck*	Jones*	Deshler*	
Franclemont*	Howard*	Fanning	Levy*	Diggins*

*Indicates present **Indicates present electronically

VISITORS: Conservation Commission Members David White, Susan Chapnick; Spy Pond Committee Chair Brad Barber, Assistant Director Public Works Teresa DeBenedictis, Friends of Menotomy Rock Park Ellen Reed, Jane Howard

MINUTES of 2/14/18 accepted as corrected. Unanimous.

ART 40 WATER BODIES FUND: White reviewed the status of six water bodies (Ref 1) describing their condition, current problems and organizations addressing these problems. Chapnick provided details on McClennan Ponds, the Reservoir, Reeds Brook and Mystic River. Reed detailed conditions on Hills Pond. Barber gave details on Spy Pond. DeBenedictis, using Ref 2, described the condition of the Water Bodies Fund now, a balance of \$40k+, together with a history and expected needs. She requested \$60k to be spent on Hills, Res, and McClennan with some to be set aside for Spy.

VOTED \$60,000 for the Water Bodies Fund. Unanimous

BUD FACILITIES: PubWks SubCom Deshler recommended the budget as printed. This dept is still building. A new director is being sought. Deshler noted charging stations, LED lights, HCHP upgrades as some of the green repairs line item. The offsets are grey bills from the schools.

VOTED \$668,826 Unanimous Deshler will inquire about the increase cost of electricity.

BUD BoS: GenGovt SubCom McKenna discussed the changes being considered.

BUD ELECTIONS: GenGovt SubCom McKenna recommended the budget as printed. He described the cost of early voting and the developing plans for this fall.

VOTED \$199,125 Unanimous

BUD ACCOUNTING & AUDITING: GenGovt SubCom McKenna recommended the budget as printed. VOTED \$78,000 Unanimous

BUD PRINTING OF TOWN REPORTS: GenGovt SubCom McKenna recommended the budget as printed. VOTED \$3500 Unanimous

ZBA GenGovt SubCom McKenna recommended the budget as printed. An extended discussion followed on the policy of filling a vacant position: whether the max or the min or something else should be budgeted. VOTED \$32,320 14-1-1.

The discussion continued on the vacant positions in the library. No consensus was reached. No vote taken.

LIBRARY INFO: Library SubCom Franclemont provided a chart (Ref 3) showing how the various groups that support the Library work together. She said the state contributed \$56,544 in FY18.

COMMITTEE: No mtg Wed. Minuteman Tech next Monday

RESERVE FUND Balance: \$1,436,230.17

Peter Howard 2/27/18 Revised 3/5/18

Ref 1 2017 Water Bodies Assessment and Recommendation

Ref 2 Water Bodies Program Analysis 2/22/18

Ref 3 Arlington Libraries – Cooperative Network.

2017 Water Bodies Assessment and Recommendation Report

Arlington Conservation Commission February 2018

The Arlington Conservation Commission has carried out an assessment of fourteen water bodies in the Town of Arlington, which include five lakes and ponds and nine streams. A majority of these are negatively impacted by polluted runoff and storm water discharges due to the highly urban nature of Arlington and surrounding towns. Most of these water bodies also have excessive aquatic invasive plants that degrade water quality, impede recreational use, and degrade aesthetics. In determining which waterbodies could benefit from management measures using Town funding, we have taken a triage-based approach:

1. Water bodies that are in generally good shape that do not need much help, or whose issues are being addressed by other agencies or funding sources, e.g., Upper & Lower Mystic Lakes and Upper Mystic River
2. Water bodies with some issues that could benefit from directed intervention, e.g. Spy Pond, Arlington Reservoir, Hills Pond, McClennen Park Detention Ponds (Reeds Brook)
3. Water bodies that are in poor shape with many issues that would need major efforts and thus funding to improve, e.g. Mill Brook, Alewife Brook.

Based on our analysis and discussions with various community groups we have identified the following five priority locations for the coming year:

- **Arlington Reservoir** – Town-owned water body in Arlington and Lexington with aquatic invasive water chestnuts that form dense, impenetrable mats at the water's surface, which impair public use and water quality. Recommend continuation of current management practices to mechanically remove water chestnut plants. In addition, the Mystic River Watershed Association (MyRWA) has been organizing hand harvesting events in the more shallow areas. Once the water chestnuts' seed bank is further depleted, the harvesting efforts and costs will be reduced. Currently this waterbody is being assessed as part of the Reservoir Master Plan project supported with CPA funding.
- **Hills Pond** – A small pond in the heavily used Menotomy Rocks Park with water quality and invasive plant problems. Recommend continuation of chemical treatments to control algae and other detrimental water plants. The Friends of Menotomy Rocks Park (FoMRP) and the Town DPW are proceeding with the reinstallation of the aeration pump system to improve pond water quality. DPW installed the electrical service in the Fall of 2017. FoMRP plans to install the pump and the aeration lines in the Spring of 2018. Additionally, we recommend that an in-depth assessment of this water body be performed to develop a best management program for the future, and Community Preservation Act (CPA) funds sought for that purpose.
- **Mill Brook** – The very poor water quality (EPA/MyRWA 2016 rating of D+) is primarily due to storm water runoff; however, the brook and its adjacent shore provide valuable wildlife habitat and opportunities for nature views. Some areas are attractive natural areas and the Working Group recommends that efforts should be made to enhance public access and investigate / mitigate illicit discharges into the brook. The Mystic River Watershed Association (MyRWA) has received CPA funds for improving public access, investigating illicit discharges and monitoring water quality of Mill Brook near Wellington Park. A design and engineering consultant, Weston and Sampson, has been hired to produce an environmental analysis of the Mill Brook corridor and schematic design for Wellington Park. This work is planned to start in early 2018. Phase I of the project, which includes

the schematic designs, is expected to be completed in Summer 2018. Updates to this project can be found at: <https://mysticriver.org/millbrook>. We also have concerns about the section of Mill Brook next to the Reservoir which has bank erosion and invasive plant issues.

- **McClennen Park Detention Ponds on Reeds Brook** – These are small constructed ponds that have major value for storm water control and provide wildlife habitat. A preliminary review indicated that there may be seepage from the landfill material – which was capped but not lined, as evidenced by the brown color (iron flocculation) of the ponds in certain locations.

The Water Bodies committee continued investigation of the iron flocculation at the McClennen Park Detention Ponds to improve the site's aesthetic, recreational, and wildlife values and functions. The results of the sampling and analysis performed in 2016-2017 by the contractor Brown & Caldwell were received and evaluated. The report of this initial assessment indicated that 1) the concentration of volatile organic compounds (VOCs) and metals that are present in the surface water and sediments do not pose a risk to human health and 2) recommended further investigation of the potential ecological risk from high iron and manganese content in the surface water and sediments.

Woods Hole Group (WHG) was chosen as the contractor to assist the Commission with the recommended ecological investigations. WHG performed a site visit in June 2017 and from that prepared a Sampling and Analysis Plan (SAP) for visual and chemical measurements of surface water and sediments in the ponds, in the upland wetlands, and in Reeds Brook. The SAP was approved by the Commission in Fall 2017 and will be implemented in Spring and Summer 2018. Results from this sampling and analysis will be used to conduct an Ecological Risk Characterization and to determine whether or not a condition of “readily apparent harm” (as defined by MassDEP) to organisms exists at the site.

- **Spy Pond** – Heavily used by public for recreation with invasive plant problems in and around the pond that impair use; also erosion along portions of the shoreline. Recommend assessment, updating or creating the operation and management plan, and continuation of aquatic invasive plant management practices. Additionally, last year we recommended assessment, design review, and implementation of shoreline erosion control, which was initiated in 2016 using CPA funding for an assessment of shoreline erosion and evaluation of design options. Currently, a project sponsored by the Conservation Commission to address implementation of erosion control based on the 2016 study is seeking CPA funding. The Town has also applied for, and received, additional funding from other sources for this project.
- **Mystic River** – The ACC and the Town of Arlington was awarded the Natural Resource Damages Assessment and Restoration Program Grant in the amount of \$47,325. The Restoration project will create a native riverbank (riparian) habitat and improve storm water quality. It is located along the Mystic River at the end of Park Street in the area that was directly impacted by oil released from a tanker truck that overturned nearby on Route 60 in May 2013.

Work began in October of 2017 to stabilize the slope along the riverbank, remove the broken concrete headwall at the storm water outfall, repair the drainage pipe, create a swale for flood storage and to percolate storm water runoff, and move the dirt footpath around this newly created riparian habitat. Enhancements to the riparian habitat, including native plantings and educational signage, will begin in Spring of 2018 with direct community involvement.

In conjunction with this project, the Town has agreed to install and maintain a new pretreatment system for the storm drain pipe that leads to the outfall at this location. This separate but linked project to be managed by the Arlington Department of Public Works (DPW) will capture oils, sediment, and litter to prevent debris and contamination from entering the newly restored wetland and reduce contamination and sedimentation in the Mystic River.

The Water Bodies Working Group has collected information for all the water bodies evaluated in support of this report. We recommend that other locations that have not been identified above as a priority for current Town Water Bodies funding should continue to be monitored, and recommendations for actions and funding should be reviewed on an annual basis.

Respectfully Submitted by:

Water Bodies Working Group of the Arlington Conservation Commission:

Susan Chapnick

Chuck Tirone

David White

Approved by the Conservation Commission on 2/15/18

Water Bodies Program Analysis

Report Date: 2/22/2018 - THD

The purpose of this schedule is to show activity of the Water Bodies and Phragmites Account over several years, specifically with a 5 year review of revenue and expenditures, current year projection and the three years of budget based on current information available.

Please note that the difference between fiscal years is one day. The ending balance as of 6/30 each year is carried forwarded to the top of the subsequent column as the opening, 7/1 balance.

1 2 3 4 5 6 7 8 9

Water Bodies Account History: 5 Years of Actual, Current Year Expected, 3 Years of Projected

MUNIS #	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Actual	FY17 Actual	FY18 In Process	FY19 Budget	FY20 Budget	FY21 Budget
Beginning Balance - 7/1	\$ 19,425.23	\$ 23,890.23	\$ 27,865.23	\$ 58,915.23	\$ 38,435.85	\$ 50,110.19	\$ 40,910.19	\$ 30,410.19	\$ 32,910.19
230 4972 Revenue/Appropriation	50,000.00	50,000.00	40,000.00	40,000.00	50,000.00	55,000.00	60,000.00	60,000.00	60,000.00
230 4831 Revenue/Donations	-	1,300.00	1,800.00	800.00	1,950.00	1,300.00	-	-	-
230 5299 Expenses - Spy Pond	(22,725.00)	(29,200.00)	-	(41,279.38)	(15,280.00)	(34,000.00)	(35,000.00)	(37,000.00)	(42,000.00)
230 5299 Expenses - Reservoir	(21,400.00)	(18,125.00)	(10,750.00)	(20,000.00)	(15,000.00)	(16,500.00)	(16,500.00)	(11,500.00)	(6,500.00)
230 5299 Expenses - Hills	(1,410.00)	-	-	-	-	(5,000.00)	(4,000.00)	(4,000.00)	(4,000.00)
Expenses - McClennen						(10,000.00)	(10,000.00)	-	-
230 5299 Expenses - CC Other			-	-	(9,995.66)	-	(5,000.00)	(5,000.00)	(5,000.00)
1 Ending Balance - 6/30	<u>\$ 23,890.23</u>	<u>\$ 27,865.23</u>	<u>\$ 58,915.23</u>	<u>\$ 38,435.85</u>	<u>\$ 50,110.19</u>	<u>\$ 40,910.19</u>	<u>\$ 30,410.19</u>	<u>\$ 32,910.19</u>	<u>\$ 35,410.19</u>

Phragmites Acct - Spy Pond - supported by donations - for use on phragmites only: 5 Years of Actual, Current Year Expected, 3 Years of Budgeted

MUNIS #	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Actual	FY17 Actual	FY18 Expected	FY19 Budget	FY20 Budget	FY21 Budget
Beginning Balance - 7/1	\$ 5,821.00	\$ 4,120.00	\$ 4,120.00	\$ 2,870.00	\$ 2,870.00				
230 4830 Revenue/Donations	100.00	-	-	-	-				
230 5290 Expenses	(1,801.00)	-	(1,250.00)	-	(2,870.00)				
2 Ending Balance - 6/30	<u>\$ 4,120.00</u>	<u>\$ 4,120.00</u>	<u>\$ 2,870.00</u>	<u>\$ 2,870.00</u>	<u>0.00</u>				

Subtotal of Water Bodies and Phragmites Acct Ending Balances (Above)

MUNIS #	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Actual	FY17 Actual	FY18 Expected	FY19 Budget	FY20 Budget	FY21 Budget
Water Bodies Fund	19,425.23	23,890.23	27,865.23	58,915.23	38,435.85				
Phragmites Fund	<u>4,120.00</u>	<u>4,120.00</u>	<u>2,870.00</u>	<u>2,870.00</u>	<u>-</u>				
3 Available Balance	<u>\$ 23,545.23</u>	<u>\$ 28,010.23</u>	<u>\$ 30,735.23</u>	<u>\$ 61,785.23</u>	<u>\$ 38,435.85</u>				

Notes

- 1) Control eurasian watermilfoil -- Treatment with "Sonar" occurs in May, every three years.
- 2) Harvesting water chestnuts -- Mechanical harvesting occurs in July to reduce the seed bed for the following year.
- 3) Control excessive vegetation -- Treatment with "Reward" occurs in May or early June, as needed.
- 4) Control algae -- Treatment with a copper compound occurs in July or August if there is an algae bloom.
- 5) Water bodies and watershed survey -- Checks the health of Arlington's water bodies and invasive plants and animals. FY20 & FY21 needs are uncertain and depend on further studies.

Water Bodies Program Analysis
Expense Detail - Actual and Projected

2

The purpose of this schedule is to provide a beakout of the expenditure detail that is summarized on the proceeding tab.

	1	2	3	4	5	6	7	8	9
Detail - FY 17 - Actual	Spy Pond	Reservoir	Hills		Other	FY Total	Spent to date	\$ \$ available	Comments
treatment/sonar - spend in FY19	14,000	-	-		-	14,000	-		Saved for FY19
treatment/reward	-	-	-		-	-			
water chestnuts/hand pull	-	15,000	-		-	15,000	15,000		
algae treatment		-	-		-	-			
water quality testing/plant id/survey	1,000				-	1,000	1,000		
phragmites treatment	280	-	-		-	280	280		also spent \$2,870 balar
ConsCom - other water bodies (McC)	-	-	-		\$9,995.66	\$9,995.66	\$9,995.66		
Total	\$ 15,280	\$ 15,000	\$ -		\$9,995.66	\$40,275.66	\$26,275.66	\$ 14,000	

Detail - FY 18 - In Process	Spy Pond	Reservoir	Hills	McClennen	Other	FY Total	Spent to date	\$ \$ available	Comments
treatment/sonar - spend in FY19	14000.00					14,000	0		Saved for FY19
treatment/reward	10000.00					10,000	10155		Spiny naiad
water chestnuts/hand pull		15000.00				15,000	15000		
algae treatment	5000.00					5,000			
water quality testing/plant id/Hills treatment	5000.00	1500.00	5000.00			11,500	1287		Hills
McClennen detention basin				10000.00		10,000	10000		
ConsCom - other water bodies	0.00	0.00	0.00		0.00	-	-	-	
Total	\$ 34,000	\$ 16,500	\$ 5,000	\$ 10,000	\$ -	\$ 65,500	\$ 36,442	\$ -	

Detail - FY 19 - Budget	Spy Pond	Reservoir	Hills	McClennen	Other	FY Total	Spent to date	\$ \$ available	Comments
treatment/sonar - spend in FY19	14000					14,000			
treatment/reward	10000					10,000			
water chestnuts/hand pull		15000				15,000			
algae treatment	5000					5,000			
water quality testing/plant id/Hills Pond	5000	1500	4000			10,500			
spy permitting	1,000					1,000			
McClennen detention basin				10,000		10,000			
ConsCom - other water bodies	-	-	-		5000	5,000	-	-	
Total	\$ 35,000	\$ 16,500	\$ 4,000	\$ 10,000	\$ 5,000	\$ 70,500	\$ -	\$ -	

Detail - FY 20 - Budget	Spy Pond	Reservoir	Hills	McClennen	Other	FY Total	Spent to date	\$ \$ available	Comments
treatment/sonar - spend in FY22	14000					14,000			
treatment/reward	10000					10,000			
water chestnuts/hand pull		10000				10,000			
algae treatment	5000					5,000			
water quality testing/plant id/Hills Pond	5000	1500	4000			10,500			
spy permitting	3000					3,000			
McClennen detention basin				-		-			
ConsCom - other water bodies	-	-	-		5,000	5,000	-	-	
Total	\$ 37,000	\$ 11,500	\$ 4,000	\$ -	\$ 5,000	\$ 57,500	\$ -	\$ -	

Detail - FY 21 - Budget	Spy Pond	Reservoir	Hills	McClennen	Other	FY Total	Spent to date	\$ \$ available	Comments
treatment/sonar - spend in FY22	14000					14,000			
treatment/reward	10000					10,000			
water chestnuts/hand pull		5000				5,000			
algae treatment	5000					5,000			
water quality testing/plant id/Hills Pond	5000	1500	4000			10,500			
spy permitting & invasives treatment	8000					8,000			Added 5k for invasives
McClennen detention basin				-		-			
ConsCom - other water bodies	-	-	-		5,000	5,000	-	-	
Total	\$ 42,000	\$ 6,500	\$ 4,000	\$ -	\$ 5,000	\$ 57,500	\$ -	\$ -	

Arlington MA Water Bodies

#	Name	Type	Location	Size	Ownership	Public Uses	Water Quality	Vegetation	Wildlife	Issues	Priority	Action Items	Monitor/ Comment
1	Arlington Reservoir	Lacustrine	Lowell St, and half in Lexington	28 acres	Town of Arlington	Swimming at Res Beach. Walking, bird watching, fishing, ice skating.	Acceptable	Many aquatic invasives. Water chestnuts are the worst.	Many birds, fish & turtles. Major migratory bird site. Regular fishing location.	Water chestnut coverage of the water surface.	High -WC control.	Water Chestnut control.	DW: Water Chestnut control could probably be better managed. DW: Current Master Plan underway with CPA funding to determine how to better manage this area.
2	Spy Pond	Lacustrine	Rt 2, Pleasant St,	103 acres 864 acres water shed 73% arlington 27% belmont The Route 2 & Belmont section of the watershed is the largest drainage area to discharge point	Town of Arlington In 1898 the town abandons its attempts to implement Spy Pond as a local drinking water source	Arlington/Belmont Crew and Arlington Boys & Girls Club, Boating, fishing, public access, boat ramp, passive recreation, ice skating.	[ref ACT report] late 1800's and early 1900's weed growth become noticeable, 1980 - 81 study	[ref ACT report] Eurasian watermilfoil 51%, Thinleaf Pondweed 20%, Filamentous Algae 16% plus 6 other invasive 1980-81 study	[ref ACT report] 120 species of birds make their home in and along its shores at some point in the year, the most notable are Canada geese Spy Pond also contains a variety of fish species. From Wikipedia, could not find this in the AM report	[ref ACT report] Increasing phosphorous levels elevated from 2007	High - Invasive aquatic plant control	Reduce phosphorus intake from the 864 acre watershed. Reduce dependence on chemical controls.	CT: Spy Pond is and will always be a managed landscape, but more effort should be made to reduce the nutrient (nitrogen and phosphorus) loading from the surrounding watershed. Increases are noted in the 2007 – 2013 Aquatic Management reports reducing water quality and ecosystem health.
3	Hills Pond	Lacustrine	Menotomy Rocks Park, near end of Churchill St	2.3 acres	Town of Arlington, Park and Rec	Birding, Nature Walks, Family gatherings, ice skating.	Good based on most recent ACT report for water quality measures (pH, alkalinity, turbidity, dissolved oxygen, nitrogen compounds, bacteria)	Invasives: watermilfoil & curlyleaf pondweed; Increases in native plant growth 2007 to 2012	Site visit 5/2/15 (SC): wood ducks, mallards, red-winged black birds, flickers, chickadees, warblers, goldfinch, etc. observed. Native aquatic vegetation; non-native not observed (may be early in season)	Impaired water body due to: • non-native aquatic plants (DEP-MA71018) • ACT report 2012 documents reduction in non-native species 2007-2012 with chemical treatments (diaquat herbicide & copper algaecide). Herbicide and algaecide treatment continued in 2017 (Ref 7).	High - Invasive aquatic plant control	Aeration: fix pump to introduce aeration as non-chemical invasive water plant control. Completion scheduled for Spring 2018.	SC: Well-used community resource for nature outings and family activities (playground on-site near pond) - more effort should be made to control invasives using non-chemical treatment (aeration) DW: Aeration system to be reinstalled in the Spring of 2018.
4	Mystic Lake-Upper	Lacustrine	Near Mystic St, Arlington, also in Medford and Winchester	~ 200 acres	DCR, Arlington, Winchester	Boating, swimming, birding, nature viewing & walks	EPA-MyWRA 2016 rating = A+ EPA & MyRWA perform water quality monitoring for bacteria, nutrients, DO, TSS, Tphos, Temp, Color, Odor	Wetland / Riparian along river bed; some bank erosion; some invasives but mainly native vegetation	2016 Herring # increased Fish Ladder counts. Birds (water fowl & birds of prey including owls & eagles), fish, amphibians, reptiles, small mammals	Slightly impaired water body due to: • non-native aquatic plants • non-native aquatic plants: water chestnuts (DEP-MA71043 & MyRWA) • Some areas of Contaminated sediments (DEP-MA71027)	Low	Maintain community access from Arlington side	SC: Water bodies show excellent water quality for boating and swimming and are well-monitored by other agencies (EPA & MyWRA). Volunteer projects (Eagle Scouts) have improved community access (trails and stairs: Windows on the Mystic); MyRWA continues to monitor lake water quality
5	Mystic Lake-Lower	Lacustrine	Near Mystic St and Mystic Valley Parkway, Arlington, also in Medford	~ 100 acres	DCR, Arlington, Medford								
6	Mystic River	Riverine	From Lower Mystic Lake to Alewife, along Mystic Valley Parkway	~ 1.5 miles in Arlington	DCR, Mystic Reservation	Boating, birding, nature viewing & walks	EPA-MyWRA 2014 rating = B+ Impaired with many outfalls / storm drain connections; PAHs, metals, total phosphorus, from urban stormwater contamination; some areas dissolved oxygen saturation & high chlorophyll-a MyRWA performs water quality monitoring (see above)	Wetland / Riparian along river bed; some bank erosion; some invasives; native vegetation	2014 Herring # increased Fish Ladder counts. Birds (water fowl & birds of prey including owls & eagles), fish, amphibians, reptiles, small mammals	Impaired water body: • CSOs (storm drains; road runoff; oil spills; historical industrial contamination) • non-native aquatic plants - Water chestnuts (MyRWA) • Contaminated sediments (DEP-MA71-02)	Medium	Control Stormwater runoff to improve water quality; potential bank restoration	SC: ACC / Town awarded NRDA grant for Mystic Riverfront Restoration; Project begun October 2017 to stabilize bank, repair broken outfall, and create new habitat; completion expected 2018 Includes companion project for installation of a new pretreatment system for storm water that leads to the outfall by Town DPW.

Arlington MA Water Bodies

#	Name	Type	Location	Size	Ownership	Public Uses	Water Quality	Vegetation	Wildlife	Issues	Priority	Action Items	Monitor/ Comment
7	Mill Brook	Riverine	From Arlington Reservoir to Lower Mystic Lake, near bikepath	~ 3 miles	Private and public owners	Nature view and wildlife habitat area.	Impaired with many storm drain connections. Grade D- in recent EPA/MyWRA report.	Mostly channeled or covered. Some vegetated bank areas.	Nesting birds. Some aquatic life below Cooke's Hollow.	Invasive JKW plants on banks. Outlet for many storm drains.	High	Improve water quality and public access	MyWRA received CPA funds to perform environmental analysis and design for Wellington Park. Phase 1, schematic designs, to be completed Summer 2018. www.mysticriver.org/millbrook
8	Alewife Brook	Riverine	From Rt 2, to Mystic River, along Alewife Brook Parkway	~ 2 miles	DCR, Alewife Reservation	Nature viewing from the Greenway path; canoeing.	EPA-MyWRA 2014 rating = D Impaired: high bacterial counts (sewer discharges & urban stormwater runoff)	Vegetated bank with some erosion. Native and non-native plants.	Water fowl; nesting birds; migratory birds; small mammals	Impaired water body due to: • CSOs: bacteria • low DO • contaminated sediments (DEP-MA71-041)	Medium	Control Stormwater runoff to improve water quality	SC: Increase public accessibility.
9	Ryder Brook	Riverine	From bikepath to Mill Brook, near Ryder St	~ 1/8 mile	Town of Arlington properties	Nature view from the bikeway.	Intermittent fed from a storm drain.	Upper section well vegetated. Lower section weedy.	Nesting birds. Small mammals - skunks, racoons have been spotted.		Low	Protect.	DW: An isolated but useful habitat area.
10	Coolidge brook	Riverine	Btwn Coolidge and Mt. Vernon St	< 1/8 mile	Private owners	No,	Clear fed by ground water and flooding with storm water runoff	Opportunities exist to make a difference with native planting and buffer edges to support flora and adapted fauna.	Nesting birds. Small mammals	habitat for wildlife, people, and pets.	Low	Public education, no salt, low phosphorus, no yard waste.	CT: Urban pocket habitat.
11	Noname Brook, aka Bow Run	Riverine	Along bikepath from Nourse Rd to Mill Lane	~ 1/2 mile	MBTA. Managed by DPW.	Walking on the bikeway	Usually flows clear being fed regularly by ground water and flooding with storm water runoff.	Overgrown with Japanese Knotweed. Shaded by a variety of trees.	Nesting birds including ducks, probably small mammals.	Japanese Knotweed that also intrude on the bikeway. Storm water flooding onto the bikeway.	Medium	JKW control.	DW: Would like to do something about the JKW.
12	Herbert Meyer Brook	Riverine	Thru Winchester Country Club, crosses Mystic St, to Upper Mystic Lake	~ 1 mile	Winchester Country Club, private owners.	Viewing and water trap.	Clear, fast running. Probably benefits from golf course watering.	Minimal, fairly open. Few invasives.	Some small animals and birds, but surrounded by grass and pavement.	Perhaps fertilizer runoff to Mystic Lake.	Low	NA	DW: Private ownership.
13	Clematis Brook	Wetland, headwater	Poets corner park, Shelley Rd	< 1/8 mile	Town of Arlington, Park Dept, possibly also church property	Wildlife habitat	Intermittent channel with some wetlands.	Some Phragmites. Many invasives including multiflora rose.	Birds and small mammals.	Invasive plants and trash dumping.	Low	Trash & invasive removal.	DW: Very overgrown with invasive plants.
14	Reeds Brook & McClennen Park Detention Basins	Riverine, stormwater detention basin and bordering wetlands.	From Winchester Town Line btwn Dothan and Wright St, thru McClennen Park to Lexington TL behind Reed St	~ 1/4 mile	Private owners, and Town of Arlington, Park and Rec	Passive recreation	Poor, unstratified warmwater basin, Receives waters/ drainage from the caped landfill into Munroe Brook downstream to the Arlington Reservoir	Bank vegetation consists of a mixture of native and introduced species, aquatic invasives	Nesting birds including ducks, mammals. There is not an abundance of wildlife but has sufficient diversity of flora and fauna to justify continued cleanup	Potential capped land fill runoff. Observed iron flocculation may impair habitat values and functions (Brown & Caldwell, 2017)	High	Continue assessment of detention basins and brook; sampling & analysis to evaluate ecological risk; need additional funding to complete assessment	Continued investigation of iron flocculation at detention ponds to improve aesthetic, recreational, and wildlife values and functions. Results of initial investigations 2016-2017 indicate potential for ecological risk from high iron & manganese. Further sampling & analysis planned for 2018.

Reference Documents

- 1 ACT, "Arlington Ponds 2007 Baseline Survey"
- 2 ACT, "2012 Arlington Aquatic Management Program - Arlington, MA. Spy Pond, Arlington Mill Reservoir and Hills Pond"
- 3 "MyWRA: Annual EPA Grade Assessment - 2014," June 9, 2015 (<http://rpubs.com/walkerjeffd/myrwa-epa-grade-2014>) including reference #5, below, and other MyWRA online information
- 4 MassDEP online information on water bodies (#s listed)
- 5 EPA Water Quality Report at <http://mysticriver.org/2014waterqualitygrade/>

Arlington Libraries - Cooperative Network

Ref 3

Library Director	Trustees	Friends of Robbins	Friends of Fox	Foundation
General Administrative Administer daily operation of the library including personnel, collection development, fiscal, physical plant and programmatic functions. Act as adviser to the Trustees and work with the Friends/Foundation and community groups to support the library's mission and goals.	Receive monthly reports on the day-to-day operations of the libraries, personnel, collection development, fiscal, physical plant and programmatic functions.	Support both libraries by offering funds for supplemental materials and equipment, by offering programs for adults, and by advocating for the Robbins and Fox libraries.	Support the Fox Branch Library by offering funds for materials, programs, facility improvements and additional hours, and by offering programs for adults at the Fox Branch Library.	The Arlington Libraries Foundation was established in 2013 by the Board of Library Trustees to serve as a fundraising organization for the Robbins and Fox Branch Libraries.
Policy Apprise Trustees of need for new policies, as well as policy revisions. Implement the policies of the library as adopted by the Trustees.	Identify and adopt written policies to govern the operation and program of the library.	Support the policies of the library as adopted by the Trustees.	Support the policies of the library as adopted by the Trustees as they pertain to the Fox Branch Library.	Support the policies of the library as adopted by the Trustees.
Planning Coordinate and implement a strategic plan with Trustees, Friends, Foundation, staff and community input. Provide status reports as appropriate.	Ensure that the library has a strategic plan with implementation and evaluation components.	Provide input into the library's strategic plan and support its implementation.	Provide input into the library's strategic plan and support its implementation at the Fox Branch Library.	Support critical library needs as identified in the long range plan and assets available from municipal budgets.
Fiscal Prepare an annual budget for the library in accordance with town charter and state requirements for accreditation. Seek adequate funds to carry out the libraries' mission. Update Trustees about ongoing negotiations and financial needs.	Oversee the management and disbursement of Trust Funds. Assist in the preparation and presentation of the annual budget to Town Meeting. Advocate for the Robbins and Fox Branch libraries.	Provide fiscal support through the ongoing book sales, special programs, DVD rental collection and membership dues. Conduct fundraising in conjunction with the Foundation.	Provide fiscal support for the Fox Branch Library through the Little Fox Shop children's thrift store, Fashion at the Fox, and through other efforts.	Conduct major library fundraising initiatives through gifts, grants and bequests from individuals and organizations. Conduct an annual mail solicitation for materials.
Advocacy Promote the mission of the library within the community. Educate the Trustees, Friends and the community regarding local, state and federal issues that impact the library.	Promote the mission of the library within the community and advocate for the library to legislators.	Promote the mission of the library within the community. Advocate for the library to legislators.	Promote the Fox Branch Library to the community. Advocate for the Fox Branch to legislators.	Create ways that will build a legacy for the future and create ongoing sources of support to insure the long-term financial stability of the libraries.
Meetings Participate in Trustees meetings and Friends meetings. Ensure that there is a liaison from the board to the Friends and update the Friends about ongoing issues that affect their organizations.	Participate in all board meetings. Appoint a liaison to the Friends/Foundation boards and receive regular updates about their activities.	Maintain and develop strong relationships with library administration and Trustee liaisons.	Maintain and develop strong relationships with library administration and Trustee liaisons.	Maintain and develop strong relationships with library administration and Trustee liaisons.